

CLAIMS

1. A nonlinear circuit comprising:

5 a nonlinear element that amplifies an input signal
in which a plurality of channels whose inter-slot boundary
arrival times do not coincide are multiplexed;

a control section that controls a voltage or current
supplied to said nonlinear element; and

10 a selection section that selects timing at which
said control section causes a set value of said voltage
or said current to make a transition.

2. The nonlinear circuit according to claim 1, wherein
said selection section selects timing at which said
15 control section causes said set value of said voltage
or said current to make a transition in synchronization
with an arrival time of an inter-slot boundary in a
plurality of said channels.

20 3. The nonlinear circuit according to claim 1, wherein
said selection section selects timing at which said
control section causes said set value of said voltage
or said current to make a transition in synchronization
with an arrival time of an inter-slot boundary in a
25 plurality of said channels, and also predicts a highest
value of said set value between a time at which said timing
is selected and a time at which said timing is next selected,

notifies said control section of predicted said highest value, and causes said set value to make a transition to said highest value.

- 5 4. The nonlinear circuit according to claim 1, wherein,
in a transient period until said voltage or said current
actually supplied to said nonlinear element reaches said
set value, said selection section does not select said
timing for causing said set value to make a transition.

10

5. The nonlinear circuit according to claim 1, further
comprising a generation section that generates a trigger
that causes said selection section to select said timing.

- 15 6. A radio communication apparatus equipped with the
nonlinear circuit according to claim 1.

7. A nonlinear amplification method comprising:

an amplifying step of amplifying an input signal
20 in which a plurality of channels whose inter-slot boundary
arrival times do not coincide are multiplexed;

a controlling step of controlling a voltage or
current used in amplification in said amplifying step;
and

- 25 a selecting step of selecting timing at which a set
value of said voltage or said current used in said
controlling step is caused to make a transition.

8. The nonlinear amplification method according to claim 7, further comprising a generating step of generating a trigger that causes selection of said timing
5 in said selecting step.